

REMARKS

Claims 1-11 and 13 are pending in this application. Claims 1 and 8 have been amended and claim 12 has been canceled by way of the present amendment. Reconsideration is respectfully requested.

In the outstanding Office Action claims 1-2, 5-6, 8, 11 and 13 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,717,892 (Sheu et al.); claims 1, 3, 6-8, 10-13 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Publication No. 2004/0136282 (Chen); and claims 4, 9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sheu et al. in view of U.S. Patent No. 6,603,717 (Kawada et al.).

35 USC § 102 Claim Rejections

Claims 1-2, 5-6, 8, 11 and 13 were rejected under 35 U.S.C. § 102(e) as being anticipated by Sheu et al. Reconsideration is respectfully requested.

First, it is respectfully submitted that anticipation requires the disclosure, in a prior art reference, of *each and every limitation* as set forth in the claims (emphasis added).¹ There must be no difference between the claimed invention and reference disclosure for an anticipation rejection under 35 U.S.C. §102.² To properly anticipate a claim, the reference *must teach every element of the claim* (emphasis added).³ “A claim is *anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described*, in a single prior art reference (emphasis added).”⁴ “The identical invention must be shown in as complete detail as is contained in the ... claim.”⁵ In determining anticipation, *no claim limitation may be ignored* (emphasis added).⁶

It is respectfully submitted that the applied art in the outstanding Office Action does not meet the above-discussed criterion. In particular, the limitations of claim 12 which recites: “the

first and second sledge driving signals *selectively drive the sledge of the optical disk drive*,” are not found either expressly or inherently in the applied art as required by the above-discussed criterion (emphasis added). In order to further emphasize this point, claims 1 and 8 have been amended to further clarify the invention and include the limitations of claim 12, which are not disclosed by the applied art. In particular, claim 1 has been amended to recite:

selectively intermittently driving a sledge of the optical disk drive by using either the first sledge driving signal or the second sledge driving signal, wherein the second sledge driving signal intermittently drives the sledge to perform error compensation.

Further, claim 8 has been amended to recite:

wherein the first and second driving signals selectively drive the sledge of the optical disk drive.

Support for the amendments is provided at least by previously presented claim 12 and at least in paragraphs [0007] to [0008], of the filed specification. Therefore, it is respectfully submitted that the amendments do not raise questions of new matter, and since these limitations were included in previously presented claim 12, do not raise new issues and do not require additional search.

Sheu et al. discloses an optical disk drive for accessing data stored on a compact disc has a housing, a sled sliding inside the housing, a driving device for driving the sled, an actuator installed on the sled, a servo device for providing a push force to drive the actuator, a control circuitry for controlling operations of the optical disk drive, an adaptive compensator, and an error signal generation circuit.¹ In particular, Sheu et al. discloses at **Step 216 of FIG. 6**, the flow chart of the control method and in the specification that: “[t]he driving force and the

¹ Sheu et al. at ABSTRACT.

supplementary force are *combined* to control the sled (emphasis added).² That is, Sheu et al. discloses *only one control signal* to control the driving device. In fact, the outstanding Office Action acknowledges the above description of this aspect of the method of Sheu et al. as being “true” at page 2, paragraph 1 and lines 14-16.

However, Sheu et al. nowhere disclose, as claim 1 recites:

selectively driving a sledge of the optical disk drive by
using either the first sledge driving signal or the second sledge
driving signal, wherein the second sledge driving signal
intermittently drives the sledge to perform error compensation
(emphasis added).

In addition, Sheu et al. nowhere disclose, as claim 8 recites: “wherein the *first and second*
driving signals selectively drive the sledge of the optical disk drive” (emphasis added).

That is, in contrast to Sheu et al., which discloses the step of *combining* both the “drive force” and “supplementary force” signals to control the sled, the claimed invention, as recited in claims 1 and 8, “selectively” uses *either one of two signals* (i.e., “either the first sledge driving signal or the second sledge driving signal”) for driving a “sledge of the optical disk.” Therefore, it is respectfully submitted that Sheu et al. does not disclose, anticipate or inherently teach the claimed invention and that claims 1 and 8, and claims dependent thereon, patentably distinguish thereover.

Claims 1, 3, 6-8, 10-13 are rejected under 35 U.S.C. § 102(e) as being anticipated by Chen. Reconsideration is respectfully requested.

Chen discloses a method for calibrating a center error offset in an optical drive and a control system capable of calibrating the center error offset.³ In particular, Chen discloses: “[t]he control signal generator 22 generates plural sets of different tracking coil control signals so as to

² *Id.* at FIG. 6; and column 7, lines 18-19.

control the tracking coil to drive the lens set **12** to different positions.”⁴ Further, Chen discloses: “when the system calibrates the center error offset, the switch **S1** connects the tracking coil control signal **TRO_1** output from the control signal generator **22** to the power drive **20**, and the switch **S2** is off to prevent the output of the sled motor servo control unit **17** from being outputted to the power drive **20**.”⁵

However, Chen nowhere disclose, as claim 1 recites:

selectively driving a sledge of the optical disk drive by using either the first sledge driving signal or the second sledge driving signal, wherein the second sledge driving signal intermittently drives the sledge to perform error compensation (emphasis added).

In addition, Chen nowhere disclose, as claim 8 recites: “wherein the *first and second driving signals selectively drive the sledge* of the optical disk drive” (emphasis added).

That is, as discussed above, Chen discloses, when the system calibrates the center error offset, the sled is not controlled by the sled motor servo control unit **17** and is held at a fixed position. Accordingly, in FIG. 4 of Chen, **TRO_1** and **TRO_2** selectively drive the lens set **12**, and only one signal **FMO** drives the sledge **11**. Thus, the indication in the outstanding Office Action that reference numbers **18** and **19** generate a second sledge driving signal is erroneous. Instead, reference numbers **18** and **19** of Chen generate a track coil control signal **TRO_2** or **TRO**, rather than a sledge driving signal, to drive the lens set **12**.

Thus, in contrast to the claimed invention, Chen does not disclose two sledge driving signals, which selectively drive the sledge. Therefore, it is respectfully submitted that Chen does

³ Chen at ABSTRACT.

⁴ *Id.* at FIG. 4; and paragraph [0022], lines 12-14.

⁵ *Id.* at FIG. 4; and paragraph [0022], lines 21-29.

not disclose, anticipate or inherently teach the claimed invention and that claim 1 and claim 8, and claims dependent thereon, patentably distinguish thereover.

35 USC § 103 Claim Rejections

Claims 4, 9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sheu et al. in view of Kawada et al. Reconsideration is respectfully requested.

Claim 4 and claim 9 are ultimately dependent on claim 1 and claim 8, respectively. As discussed above, Sheu et al. does not disclose all the limitations of either claim 1 or claim 8. Thus, at least for the same reasons, Sheu et al. also does not disclose the limitation of claims 4 and 9.

In addition, the outstanding Office Action acknowledges deficiencies in Sheu et al. and attempts to overcome those deficiencies by combining Kawada et al. with Sheu et al.⁶ However, Kawada et al. cannot overcome all of the deficiencies of Sheu et al., as discussed below.

Kawada et al. discloses an optical disk reproducing device that controls movement of the focus point of laser beams, which is irrelevant to error compensation for an optical disk drive.⁷ Moreover, Kawada et al. nowhere disclose, as claim 4 recites:

selectively driving a sledge of the optical disk drive by using either the first sledge driving signal or the second sledge driving signal, wherein the second sledge driving signal intermittently drive the sledge to perform error compensation (emphasis added).

In addition, Kawada et al. nowhere disclose, as claim 9 recites: “wherein the *first and second driving signals selectively drive the sledge of the optical disk drive*” (emphasis added). Thus, Kawada et al. cannot overcome all of the deficiencies of claim 4 and claim 9. Therefore, it is

⁶ Outstanding Office Action at page 7, paragraph 6 and lines 4-8.

respectively submitted that neither Sheu et al. nor Kawada et al., whether taken alone or in combination, disclose, suggest or make obvious the claimed invention, and that claims 4 and 9, and claims dependent thereon, patentably distinguish thereover.

Conclusion

In view of the above amendments and remarks, Applicants believe that each of pending claims 1-11 and 13 in this application is in immediate condition for allowance. An early indication of the same would be appreciated.

In the event the Examiner believes an interview might serve in any way to advance the prosecution of this application, the undersigned is available at the telephone number noted below.

⁷ Kawada et al. at ABSTRACT.

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Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 22-0185, under Order No. 22171-00020-US1 from which the undersigned is authorized to draw.

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